Vision • Commitment • Pride

FOREST STEWARDSHIP MANAGEMENT PLAN

Prepared For: West Bolivar School District

Prepared By: Cheryl Arnold Ms. Forestry Commission

Time Period Covered by This Plan: 2012 - 2021

Date Plan Prepared: 2012-02-15

Plan Type: Stewardship / Stewardship

This plan was developed in accordance with the rules of the Stewardship program.

Property Name: 16-T23N-R8W

TABLE OF CONTENTS

LANDOWNER INFORMATION	3
FORESTER INFORMATION	3
DISCLAIMER	3
INTRODUCTION	3
OBJECTIVES	4
PROPERTY DESCRIPTION	4
GENERAL PROPERTY RECOMMENDATIONS	5
SOIL TYPES	7
STANDS	8
PLAN MAP	11
PLAN MAP	12
STAND ACTIVITY SCHEDULE	13

LANDOWNER INFORMATION

Name: West Bolivar School District

Mailing Address: P.O. Box 189

City, State, Zip: Rosedale, MS 38769
Country: United States of America

Contact Numbers: Home Number:

Office Number: 662-759-3525 Fax Number: 662-759-6795

E-mail Address: hphillips@mde.k12.ms.us

Social Security Number (optional):

FORESTER INFORMATION

Name: Cheryl Arnold, Service Forester

Forester Number: 01662

Organization: Ms. Forestry Commission

Street Address: P.O. Box 1646

148 N. Edison St.

City, State, Zip: Greenville, MS 38702

Contact Numbers: Office Number: 662-332-3358

Fax Number:

E-mail Address: carnold@mfc.state.ms.us

PROPERTY LOCATION

County: Bolivar Total Acres: 636 Latitude: -91.03 Longitude: 33.84

Section: 16 Township: 23N Range: 8W

DISCLAIMER

This information was derived from a small sampling of the forest resources. It reflects a statistical estimation that is only intended to be accurate enough for the purposes of making decisions for the short-term management of these resources. These estimations are temporally static. Events and circumstances may occur within the survey area that will physically alter the forest resources and therefore will not be reflected in this plan.

INTRODUCTION

This Forest Stewardship Management Plan will serve as a guide for accomplishing the goals and objectives for your property. In addition to addressing your specific goals and objectives, this plan includes recommendations for maintaining soil and water quality and protecting your forest from insects, disease, and wildfire. Recommendations are based on observation and assessment of the site.

OBJECTIVES

Timber Production

The goal is to produce high quality sawtimber. This will be accomplished through reforestation and timber stand improvement practices such as herbicide applications, prescribed burning, thinning at specified intervals, and other silvicultural practices. Forestry Best Management Practices will be implemented to prevent erosion and protect water quality.

Wildlife Management - General

The goal is to provide a diversity of habitats suitable for a variety of game and non-game wildlife species. Habitat management will focus on developing a variety of food, cover, water, and space. This will be accomplished by establishing and maintaining access roads and firelanes, providing openings within the forest, and the management of trees located within the Streamside Management Zone.

PROPERTY DESCRIPTION

General Property Information

This section is located in the West part of Bolivar County adjacent to Great River Road State Park at Rosedale, MS. It is just off of the Mississippi River Levee. The Mississippi River Levee board maintains a right of way that extends 1500 feet outwared from the center of the top of the levee. Any forest land within the right of way can only be thinned. It is bordered on the West, North, and South by private forest land. Looking to the east, you will see a combination of fields and rural urban areas. It contains a total of 318.73 acres of nonforest land. This inleudes the middle school, highway, the Missisippi River levee, and general rural farming areas, and 22.05 acres of borrow pits and marshy areas within the forest stand.

Water Resources

The Mississippi River lies adjacent to this section but does not flow through it. It is affected by the rise and fall of the river however. No perennial water resources were identified during a reconnaissance of the property. However, intermittent streams and drains identified will be managed in accordance with Mississippi's Best Management Practices.

Timber Production

The goal is to maximize the production of high quality timber. This will be accomplished through the application of timely thinning and other silvicultural practices designed to enhance timber quality and growth. Forestry Best Management Practices will be implemented to prevent erosion and protect water quality.

Threatened and Endangered Species

No threatened and endangered species were identified during the reconnaissance and evaluation of your property. However, if any endangered or threatened species were discovered on the property, special management strategies will be implemented immediately in order to protect the species. It is important to note that the Black Bear has been seen in the general area.

Interaction with Surrounding Property

Prescribed practices should be carried out in a manner that will minimize adverse impacts on surrounding properties. Consideration should be given to potential air, water, visual, and other impacts. In addition, practices carried out should have positive effects on the surrounding community such as improved wildlife habitat and soil stabilization.

Soils General

Soils were evaluated on the property to determine the suitability of the site for the proposed activities. Forest practices were planned so as to minimize erosion or other adverse effects on the soil. The following soils are identified for this property: Alluvial (Ak), Commerce (Cg, Cc, Ce).

Archeological and Cultural Resources

No archeological or cultural resources were identified during a reconnaissance of the property. However, if archeological or cultural resources are discovered at anytime on the property, special management strategies will be implemented to protect these sensitive areas. These areas can include: churches, old cemetaries, old home sites, indian mounds, and areas of historical interest.

GENERAL PROPERTY RECOMMENDATIONS

Forest Protection

A healthy and vigorously growing stand is the best defense to an attack from a variety of forest insects, plants and pathogens.

Insects and Diseases

Trees are subject to attack from insects and diseases. Different insects and diseases affect trees according to the age, species, and condition of the trees. Planted stands of pines and pure stands of hardwoods are particularly susceptible to attack. Since there are many different insects and diseases, no attempt will be made here to explain all of them. The property should be inspected at least annually for possible signs of insect and disease activity. Some things to look for are:

- · Unseasonable leaf fall
- Discoloration of leaves or needles
- Pitch pockets on pine trees
- · Heavy defoliation of hardwood leaves
- · Groups of three or more dying trees within a stand

This list does not cover all instances of insect or disease attacks. If anything unusual is noticed, report it to a forester. In most cases, insect and disease problems can be controlled if discovered early.

Fire Protection

Your forest should be protected from wildfire at all times. The best way to protect your investment is by establishing and maintaining firebreaks around the property. Guidelines

for establishment and maintenance of firebreaks may be found in Mississippi Forestry Commission publication #107, *Mississippi's Best Management Practices*.

Grazing

Tree seedlings should be protected from grazing until such time as the terminal bud of the sapling is beyond reach of livestock. Domestic livestock should be denied access to the tree planting area.

Boundary Lines

It is the responsibility of the landowner to ensure that all property lines and boundaries designating areas to receive forestry work are clearly identified and visible to all contractors.

Note: Some forest practices may cause temporary adverse environmental or aesthetic impacts. These practices will only cause short-term adverse impacts where they are installed. Special efforts will be made to minimize adverse effects when carrying out any of the practices. Examples include: site preparation, planting, prescribed fires, firebreak installation and maintenance, road installation and maintenance, pesticide applications and timber harvesting.

Water Quality Protection

The objective of the landowner is to protect, preserve and enhance all water sources on or transecting the property. This can best be achieved by implementation of Best Management Practices in all aspects of the management of the property.

Aesthetics

The goal is to assure that the property is managed in such a way that is aesthetically pleasing to the landowner as well as the community. Activities could include, maintaining buffer strips along the road and adjacent to the home site, planting wildflowers along the road, and trees with attractive fall and spring color along the drive and near the home site.

Ecological Restoration

Ecological restoration is the process of assisting the recovery of an ecosystem that has be degraded, damaged, or destroyed. A reconnaissance of the property has been conducted and no ecological restoration activities are recommended at this time.

Wildlife Mgt. Target Species

The objective of this practice is to provide habitat best suited for the featured or target species. Habitat management will focus on providing food, cover, water, and space to facilitate the target species.

Environmental Education

Environmental educational goals are to provide educational opportunities for children and adults through the development of items such as nature trails with tree identification markers, wildlife viewing areas, picnic areas, parking, public restroom facilities.

Wildlife Management General

The goal is to provide a diversity of habitats suited for a variety of game and non-game wildlife species. Habitat management will focus on providing a variety of food, cover, water, and space. This will be accomplished, in part, by establishing and maintaining access roads and firelanes, providing openings within the forest, and leaving mast producing and den trees.

Timber Management

Timber management goals for this property are to manage timber resources in such a manner as to maximize timber production throughout the life of the stand.

Recreation

According to landowner objectives the recreational use of the property could prove to be an avenue for personal enjoyment or for generating income. An evaluation of your property should be conducted and a plan developed to accomplish your specific goals for recreational activities on your property.

SOIL TYPES

Cg

The Commerce component makes up 40 percent of the map unit. Slopes are 0 to 3 percent. This component is on flood plains. The parent material consists of loamy alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is very high. Shrink-swell potential is moderate. This soil is rarely flooded. It is not ponded. A seasonal zone of water saturation is at 33 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria. The Robinsonville component makes up 30 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains. The parent material consists of loamy alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is high. Shrink-swell potential is low. This soil is rarely flooded. It is not ponded. A seasonal zone of water saturation is at 60 inches during January, February, March, April. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 1. This soil does not meet hydric criteria.

Cc

The Commerce component makes up 90 percent of the map unit. Slopes are 0 to 3 percent. This component is on flood plains. The parent material consists of loamy alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is very high. Shrink-swell potential is moderate. This soil is rarely flooded. It is not ponded. A seasonal zone of water saturation is at 33 inches during January, February, March, April, December. Organic matter content in the surface horizon

is about 2 percent. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria.

Ce

The Commerce component makes up 90 percent of the map unit. Slopes are 0 to 3 percent. This component is on flood plains. The parent material consists of loamy alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is very high. Shrink-swell potential is moderate. This soil is rarely flooded. It is not ponded. A seasonal zone of water saturation is at 33 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria.

Ak

Generated brief soil descriptions are created for major soil components. The Alluvial soils is a miscellaneous area for soils found between the main levee and the Mississippi River.

STANDS

Stand Sawtimber (S#2)

Stand Description

Stand #2 is located on the river side of Mississippi Rive Levee. This stand is subject to the Mississippi Levee Board right of way that was discussed in the general property description. It contains approximately 16.29 acres. This portion of the section also is adjacent to borrow pits and sloughs, which could limit logging activity. The stand contains about 102 square feet of basal area and 103 trees per acre. The volume includes 49 tons of sawtimber per acre and 7 tons of pulpwood per acre. The stand is 61 years old. Species present include Sweetgum, Green Ash, Sugarberry, Pecan, Cottonwood, Elm and some Oaks.

Stand Recommendations

This stand should be allowed to grow for the next 10 years. The Mississippi Forestry Commission will monitor it for fire, insect, and disease activity. Due to the right of way held by the Mississippi River Levee Board, this stand could only be thinned.

Stand Sawtimber (S#3)

Stand Description

Stand #3 is located on the river side of Mississippi Rive Levee. This stand is subject to the Mississippi Levee Board right of way that was discussed in the general property description. It contains approximately 24.5 acres. This portion of the section also is adjacent to borrow pits and sloughs, which could limit logging activity. The stand contains about 102 square feet of basal area and 103 trees per acre. The volume includes 49 tons of sawtimber per acre and 7 tons of pulpwood per acre. The stand is 61 years old. Species present include Sweetgum, Green Ash, Sugarberry, Pecan, Cottonwood, Elm and some Oaks.

Stand Recommendations

This stand should be allowed to grow for the next 10 years. The Mississippi Forestry Commission will monitor it for fire, insect, and disease activity. Due to the right of way held by the Mississippi River Levee Board, this stand could only be thinned.

Stand Sawtimber (S#5)

Stand Description

Stand #5 is located on the river side of Mississippi Rive Levee. This stand is subject to the Mississippi Levee Board right of way that was discussed in the general property description. It contains approximately 180.65 acres. This portion of the section also contains borrow pits and sloughs, which could limit logging activity. The stand contains about 102 square feet of basal area and 103 trees per acre. The volume includes 49 tons of sawtimber per acre and 7 tons of pulpwood per acre. The stand is 61 years old. Species present include Sweetgum, Green Ash, Sugarberry, Pecan, Cottonwood, Elm and some Oaks.

Stand Recommendations

This section will be looked at for a possible thin in the year 2018. It contains 180.65 acres total. Due to the levee board right of way, a portion of the section can only be thinned. The right of way extends from the center of the levee road outward 1500 feet on both sides of the levee. This section is very close to a school and the city of Rosedale, Ms which could create some problems.

Stand Sawtimber (S#6)

Stand Description

Stand #6 is located on the river side of Mississippi Rive Levee. This stand is subject to the Mississippi Levee Board right of way that was discussed in the general property description. It contains approximately 95.54 acres. This portion of the section also is adjacent to borrow pits and sloughs, which could limit logging activity. The stand contains about 102 square feet of basal area and 103 trees per acre. The volume includes 49 tons of sawtimber per acre and 7 tons of pulpwood per acre. The stand is 61 years old. Species present include Sweetgum, Green Ash, Sugarberry, Pecan, Cottonwood, Elm and some Oaks.

Stand Recommendations

This stand of 95.54 acres will be harvested in the year 2013. The levee board right of way will affect how we cut part of the section. The 1500 feet covered by the right of way will be thinned. The rest of the section will either be thinned or undergo a final harvest depending upon cruise data results. Boundary lines on the west side must be established as well prior to cutting.

Activity Recommendations

95.54 acres will be thinned in the year 2013.



16-23-8 West Bolivar School District 2012 to 2021 635.71 Acres





S16 T23N R8W Bolivar County West Bolivar BOE



Property		
Property (1)		
Property (1)		
Category 1: Stands		
Sawtimber (3)		
Non-Stocked (1)		
Category 3: Non-Forest Stands		
Non-Forest (7)		
MFC Basemap		
County Boundary	Natural Gas Lines	Physiographic Region
County Boundary (1)	Natural Gas Lines (1)	Delta (1)
County boundary (1)	Natural Gas Lines (1)	Delta (1)
Quadrangle Grid	School Sections	Soil Associations
USGS Quad (1)	School Sections (1)	commerce-robinsonville-crevasse (1)
PLS Townships	Public School Districts	Surface Geology
PLS Townships (1)	WEST BOLIVAR SCHOOL DISTRICT (1)	ALLUVIUM (1)
Survey Districts	US Congressional District	Recreational Facilities
District 2 (1)	US Cong Dist #2 (1)	• Other (1)
Blockgroup (Census 2000)	MS Senate	 Community Playfield (1)
Blockgroup (Census 2000) (1)	12 (1)	MFC Districts
		MFC Districts (1)
Block (Census 2000)	MS House	
Block (Census 2000) (18)	29 (1)	MFC Areas
Tract/BNA (Census 2000)	Intermittent Streams	MFC Areas (1)
Tract/BNA (Census 2000) (1)	Intermittent Streams (1)	Incorporated Cities
		Incorporated Cities (1)
City Streets	Hydrologic Units (Basins)	
City Streets (19)	BOGUE PHALIA RIVER (1)	State Parks
County Roads	MS RIVER ABOVE LAKE BEULAH (1)	State Parks (1)
County Roads (1)	Historic Forest Boundary	MS Outline
County Rodds (1)	Bottomland Hardwood (Oak-Gum-Cottonwood-C	(vpress) (1) MS Outline (1)
US/State Highways		,,,,,
State Highway (3)	MS Forest Habitat	
Active Railroads	YAZOO BASIN WETLANDS (1)	
Active Railroads (1)		
The region of th		

Stand Activity Schedule for West Bolivar School District 16 23N 8W

Strata	Stand	Activ	vity	Acre	Est. Cost	Est. Revenue
2013						
1	6	Harvest, Mechanical, Thin,	Harvest, Mechanical, Thin, Machine, Misc Hardwood		\$3,360.00	\$50,400.00
			Yearly Totals	96	\$3,360.00	\$50.400.00
2018						
1	5	Harvest, Mechanical, Thin,	Machine, Misc Hardwood	100	\$3,500.00	\$52,500.00
			Yearly Totals	100	\$3,500.00	\$52,500.00
			Grand Totals	196	\$6.860.00	\$102.900.00